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Volume Title: Consumer Instalment Credit and Economic Fluctuations

Volume Author/Editor: Gottfried Haberler

Volume Publisher: NBER

Volume URL: http://www.nber.org/books/habe66-1

Publication Date: 1966

Chapter Title: Appendices to "Consumer Instalment Credit and Economic Fluctuations"

Chapter Author: Gottfried Haberler

Chapter URL: http://www.nber.org/chapters/c1916

Chapter pages in book: (p. 177 - 232)

Further Observations on the Relations Between Consumer Saving and Instalment Credit

Further Observations on the Relations Between Consumer Saving and Instalment Credit

IN CHAPTER 2 the saving and dissaving of an individual were defined as positive and negative changes in his net worth,[1] that is, his assets minus his liabilities. Assets were defined as real goods plus cash and claims. The present appendix contains some elaboration of the definitional scheme adopted, a discussion of certain alternative definitions and of the correlative concept of investment, and a further consideration of possible effects of instalment credit on consumer saving.

THE CONCEPTS OF SAVING AND INVESTMENT

An individual's net new investment during a certain period may be defined as the value of the increment of real goods (exclusive of claims and debts) in his possession.[2] This increment may be positive (investment) or negative (disinvestment). Thus if a retailer increases his inventories by buying from a wholesaler or manufacturer he is said to invest. If he is able to pay for the goods out of his income (profits) of the period, he increases his net worth and must also be said to save. If he buys on credit he increases his liabilities along with his assets and hence does not save. But the wholesaler or manufacturer, who reduces his inventories, is said

[1] A qualification must be made concerning unexpected capital gains and losses. These have to be excluded from income and hence from saving. The problem of defining these gains and losses is a difficult one, but we need not go into it, because the treatment of instalment credit in the computation of income and saving is not thereby affected.

[2] In everyday language and business usage the word "investment" is frequently used to include the purchase of securities (claims). People are said to invest their money in bonds or shares. Economists have become more and more accustomed to restrict the word "invest" to investment in real goods. It is in the latter sense that we shall use it in this study. (The definition must be qualified, like the above definition of saving, with respect to unexpected value changes of real assets.)

to disinvest, though he does not dissave, since he receives another asset (cash, or in case he sells on credit, a claim on the retailer).

For a closed economy as a whole the interpersonal exchanges of goods cancel out, and investment becomes equal to the value of new goods produced minus wear and tear and consumption, in other words, the value of unconsumed output.[3] Since total claims (assets exclusive of real goods) are equal to total debt, and changes in outstanding claims are equal to changes in outstanding liabilities, they cancel out for the economy as a whole, and aggregate saving is equal to aggregate investment. For any individual, however, saving and investment may be different.[4]

It is true that these are not the only possible definitions of saving and investment; there are others under which saving and investment need not be equal, even for society as a whole. The relative merits of the various possible definitions need not be discussed here. It is sufficient to say that the proposed definitions

[3] There are, of course, many difficult problems of detail, for example, those connected with the treatment of changes in the value of existing goods due to price changes or with the depreciation of fixed capital; but these need not be discussed here.

[4] If we adopted the broader meaning of the term "investment" mentioned above, and included the purchase of bonds and other claims among "investments," saving and investment would become equal, or rather identical, for the individual as well as for society as a whole, except perhaps for increases in cash holdings (because if a person increases his cash holding he would not be said to invest in money, although he would be said to save).

It should be noted that "hoarding," that is, the accumulation of idle cash (notes or deposits), does not, under our definition, destroy the equality of saving and investment. If some people hoard during a certain period, say a year, they will hold more cash at the end of the year than at the beginning and to that extent they must be said to have saved. The question arises, where is the corresponding investment? The answer is as follows. Suppose, first, that the total amount of money has not changed. Then if some people hold more money others must hold less. Those who have parted with money must have received something in exchange. If they have consumed what they have received, then they have eaten up an asset which they possessed and must be said to have dissaved. If they have kept the goods which they received (stored up in the shape of inventories or in the value of the product, if they used the goods productively) they must be said to have invested. Hence the saving of the hoarders is either canceled by dissaving or matched by investment of the dishoarders. And if the quantity of money in existence has increased it is again true that those who hold more money have saved. But if the increase is in credit money (bank deposits or bank notes) it constitutes a liability of the banks, and hence the dissaving of the banks cancels the saving of the hoarders. And if it is gold (from import or from production) we would call the rise in the gold stock an investment. (This note has been prompted by comments made independently by Professors J. W. Angell and H. S. Ellis, for which the writer is much indebted.)

seem to be the most convenient for the present purpose; they correspond best to the accountant's usage of the terms and are used by a great number of contemporary economists.[5]

Some elaborations may be added to the distinction, mentioned in the text, between the narrower and the broader interpretation of saving and investment. This distinction depends on the exclusion or inclusion of durable consumer goods among the assets. The total assets of any individual may be divided into two categories: first, consumer capital (durable consumer goods); and second, securities (including bonds, shares, saving balances and cash) and producer goods (business capital). Saving in the broader sense is defined as an increment in the sum of all these items; in the narrower sense it is an increment in the items of the second classification only (in either case minus any increment in liabilities).[6] If, for example, a consumer buys an automobile out of his annual income, he must be said to save in the broader sense, but in the narrower sense he does not save. According to the broader definition of saving he consumes the car gradually later on, when he uses it up; according to the narrower definition he consumes it when he buys it. The difference turns out to be a difference in dating the act of consumption.

Similarly for society as a whole. When the number of automobiles owned by consumers increases, we speak of investment or capital formation in the broader sense; if we adopt the narrower definition of investment we must say that consumption has increased. On the other hand, when the stock of automobiles in the hands of dealers and manufacturers goes up, or the number of cars used for business purposes increases, we have to speak of investment (and saving) also in the narrower sense.

If we adopt the broader definition we must be careful to make allowance for the gradual consumption (depreciation by wear and tear and obsolescence) of the durable goods included. For practical purposes this imposes serious limitations, because it is impossible to trace statistically certain durable goods after they have left the retail store and have entered the household. Strictly

[5] Other definitions and their relation to the ones adopted in the text have been discussed by the present writer in "National Income, Savings and Investment" (in National Bureau of Economic Research, *Studies in Income and Wealth,* vol. 2, 1938) and in the book *Prosperity and Depression* (editions of 1939 and later) Chapter 8. The definition adopted in the text is equivalent to that of Keynes, and its adoption marks a terminological departure from the present writer's usage in *Prosperity and Depression.*

[6] Since saving and investment are *both* defined either inclusive or exclusive of durable consumer goods, this distinction cannot give rise to a difference between saving and investment.

speaking, even a pair of socks is not consumed at the moment it is bought by the ultimate consumer but is only gradually used up after it has been bought. For reasons of statistical expediency, however, it is customary to regard not only comparatively short-lived goods, such as clothing and shoes, but also goods that are difficult to trace statistically, such as fountain pens and furniture, as having been consumed at the moment of purchase, even though they may later change hands many times through the secondhand market. Thus even the broader definition of saving does not, strictly speaking, include all durable goods. But it includes those regarding which it is possible to make allowance for gradual disappearance and eventual passing out of existence. Automobiles and dwelling houses are the most important.

What are the economic implications and what are the reasons that may prompt a writer to adopt the one or the other of the two definitions? From the point of view of theoretical simplicity and elegance the broader definition is superior.[7] There are striking similarities between durable consumer goods and producer goods. The acceleration principle of derived demand applies in both cases.[8] Hence it is tempting to regard durable consumer goods as capital goods, and only their services as the true consumption goods.

An objection to the adoption of the broader definition of saving has been that it obliterates the line between thrift and prodigality, between economy and waste.[9] Those who take this position contend it is absurd to say that a man who buys a luxury car out of his income "saves" and does the same thing as a man who buys a saving bond. They declare that it is dangerous and unwise to blur the distinction between frugality and extravagance, and that it makes a significant difference whether productive resources are devoted to consumption or production.

The answer must be that these distinctions are very important but that the adoption of the broader definition of saving does not prevent the recognition of their importance. As was pointed out before, the difference between the two definitions is essentially one of dating the act of consumption. Under the narrower definition we register the act of consumption at the date of the purchase of the automobile. Under the broader definition we register it later at successive dates when the car is actually used

[7] Therefore it is usually adopted by economic theorists. See, for example, I. Fisher and F. H. Knight in their various writings on capital and interest.

[8] This point was discussed at various points in the text.

[9] I am indebted to Cyril James and J. A. Schumpeter for stimulating comments and suggestions on this point.

up. It follows that for longer periods the two magnitudes designated by our two concepts tend to converge. If the analysis is carried through the whole life of the durable goods (until they are completely used up), it will yield the same result whether the broader or the narrower definition of saving is employed.

It certainly does make a difference whether many people devote a large part of their income to the purchase of durable consumption goods or, by buying bonds or shares, make it available for investment in factories, mines, power plants and other productive assets. It has been objected that the productivity of all goods, consumer as well as producer goods, depends ultimately on the stream of satisfaction ("psychic income") which they yield. Hence there is no essential difference, it has been said, between a factory, for example, and a swimming pool or an amusement park; ultimately both produce some sort of consumable goods or services. (That some forms of consumption may be objectionable from a moral standpoint, and others not, is irrelevant to the economic analysis.) In answer to this objection it should be pointed out that it makes a great deal of difference whether the wealth of a country is put in a form in which it is capable of producing more wealth (producer goods) or in a form in which it is committed to consumption (consumer goods).[10]

It must be said, however, that a recognition of this factor does not necessarily imply the rejection of the broader definition of saving and investment. In fact, the adoption of the narrower definition does not give sufficient expression to the circumstance in question. If there is an increase in the stocks of consumption goods, durable or non-durable, held by dealers and producers, even those who favor the narrower definition speak of saving and investment. But these goods (if they cannot be used for productive purposes) are committed to consumption whether they are held by dealers or by consumers.[11]

Let us now apply these definitions to instalment credit transactions. We may assume first that the proceeds of a loan are spent on perishable consumer goods and that these are con-

[10] This last is important, even though many goods can be used for either purpose and may, in fact, serve both purposes at the same time, that is, afford enjoyment *and* increase producing capacity. A swimming pool, for example, may not only afford pleasure and enjoyment to many people but also improve their health and thus raise their producing and earning power.

[11] It might be contended that the dealer does not intend to consume the proceeds of the consumer goods which he keeps in stock. The answer is that the consumer too may change his mind and sell his car and buy a bond instead. If he does not do this, if he actually consumes the good, his behavior will be registered as consumption under the broader definition of

sumed immediately. In this case it makes no difference whether we use saving and investment in the narrower or broader sense. Consumption has been increased without a corresponding rise in income. Total assets have remained unchanged while liabilities have increased. Hence the instalment buyer has dissaved to the extent of the loan; in other words, the consumption debt constitutes an act of negative saving in both the broader and the narrower sense.[12] But as the loan is gradually repaid out of income, by cutting down current consumption, the instalment debtor reduces his liabilities and must be said to save to that extent.[13] Over the whole period of the loan dissaving and saving cancel out.[14] Thus not only for each individual borrower, but also for all borrowers combined, instalment credit implies dissaving when the amount of outstanding credit expands, positive saving when outstandings contract, zero saving when they remain unchanged (new credits being balanced by repayments).

More important and more difficult to analyze is the case in which the loan is spent on durable goods. Let us first ask what such a credit transaction implies for saving in the broad sense of the term. Assume that a consumer buys an automobile in January on the instalment plan. The price is $1000. He makes a down payment of $200 out of his current income and promises to repay his debt of $800 in eight equal monthly instalments. The automobile, we will say, depreciates to zero in fifty months, the depreciation allowance being uniformly $20 a month. In Janu-

[12] His total saving during the period may be negative or positive according to whether the act of negative saving is compensated by acts of positive saving. The question whether people are likely to save and run into consumption debts during the same period of time was discussed in Chapter 2.

[13] If the debtor refinances the loan (incurs a new debt in order to repay the old one) or if he repays the debt by liquidating an asset (for example, by drawing the money from a savings account or by selling securities), no saving takes place.

[14] Interest payments are best regarded as deductions from the borrower's income.

saving too. The difference is that under the narrower definition he is said to consume at an earlier date, at the point when by buying the durable consumption good he declares, as it were, his intention to consume in the future. Under the broader definition the actual act of consumption is counted, not the mere declaration of intention.

There is this further inconsistency in the use of the narrower definition of saving and investment: the purchase of a car for pleasure trips is called consumption, but the purchase of a car that is to be rented to others for such trips is an act of investment, although economically the cases are similar. Many other examples could be found, such as one-family homes vs. apartment houses, washing machines in households vs. laundry equipment.

ary, then, the man invests \$1000 and saves \$200 (corresponding to that part of the price which he pays out of current income).[15] In February he pays the first \$100 instalment on his debt out of his current income; this constitutes saving because it diminishes his liabilities. But he has also disinvested and dissaved to the extent of \$20, because (by assumption) the value of the automobile has decreased by that amount during the month. Hence his net saving is \$80. After eight months his aggregate saving amounts to \$1000, the original amount of his investment, but he has also dissaved and disinvested \$160 (depreciation of the car). Hence at the end of the eight-month period his net saving and net investment resulting from the instalment purchase is \$840—the value of the automobile at that date, its price having been paid out of the income of the whole period.

If we adopt the narrower sense of the terms "saving" and "investment" the analysis is simpler. The consumer dissaves and consumes \$800 in January and then saves \$100 per month until the debt is liquidated. After eight months his initial dissaving is completely canceled by saving. Over the whole period he has neither saved nor dissaved. According to the broader definition he has saved \$840 because it was assumed that the liquidation of the debt proceeds faster than the depreciation of the corresponding asset (or the durable consumer good).

It follows that according to the broader definition we obtain a higher saving figure. This is, of course, to be expected. It should be noted, however, that this difference becomes smaller the longer the period which we take into consideration (over which we figure saving and investment). If we draw up our balance sheet at a later date, when the automobile has been used up, there is no longer any saving arising from this transaction, even under the broader definition. But it remains true that if we have a continuous succession of overlapping credit transactions there will always be more saving and investment in the broader than in the narrower sense.

It goes without saying, and need not be demonstrated in great detail, that the actual consequences, the stimulating and de-

[15] If we chose to evaluate the automobile at the lower resale value rather than at the purchase price we should have to say that as soon as the consumer buys his car he "consumes" (and hence "dissaves") to the extent of the difference between the purchase price and the resale value. This may or may not outweigh the saving represented by the down payment.

The alternative assumption that the down payment is made out of past savings (rather than out of current income) may be very realistic in many cases, but it would complicate the example without raising essentially new problems and it may be left to the reader to work out its implications.

pressing effects of expansion and contraction of credit, can be described in terms of either of the two definitions. What is said in the text in terms of the narrower definition of saving could just as well be expressed in terms of the broader definition. To give an example, it is said in the text that the extension of new credit will entail a stimulating expansion of consumer expenditure if it leads to dissaving (in the narrower sense) by the consumer. If we adopted the broader definition the same stimulating effect ought to be described as investment expenditure rather than as consumption expenditure. In Keynesian language we would have to say, under the narrower definition of saving and investment, that the marginal propensity to consume has been shifted upward, and, under the broader definition, that the marginal efficiency of capital has been raised. The influence on output, employment and prices is in both cases the same.

POSSIBLE EFFECTS OF INSTALMENT CREDIT ON CONSUMER SAVING

Thus far this discussion has been concerned with matters of definition and language. The question has been not how credit influences the debtor's saving and consumption, but how certain assumed credit transactions are to be described in terms of certain accepted economic terminologies. These questions must be sharply distinguished from others, similar in appearance but different in nature—questions concerning cause and effect. These were broached in Chapter 2. There we asked how instalment credit influences the spending and saving habits of the consumer. What would consumers do if no credit were available? How would they then dispose of the sums otherwise needed for instalment payments on principal and interest?

A certain type of behavior was accepted as the most probable. Others were considered and rejected as unlikely. It may be useful to enumerate here in more systematic fashion various possibilities. By making two extreme assumptions with respect to the influence exerted on saving and expenditure by new credits, on the one hand, and by repayments, on the other, and combining these assumptions in complete credit transactions, we obtain four standard cases. In this we shall disregard the finance charge and adopt the narrower definition of saving, as described above. (The four cases could, of course, be rephrased in terms of the broader definition.) There follow, then, four extreme possibilities regarding consumer behavior if instalment credit were not available (or were refused because of its high cost).

1. *Consumers would* NOT BUY *the commodities otherwise bought on credit, and would* SPEND *on consumption the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits cause dissaving (because, without credit, liabilities would not increase and net worth would be greater), and repayments cause saving (because consumption is reduced in order to provide money for the repayment of the debt), the complete transaction effecting no change in saving.

2. *Consumers would* NOT BUY *the commodities otherwise bought on credit, and would* SAVE *the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits cause dissaving (for the same reasons as those listed above), but repayments have no effect on saving (because the money would have been saved anyway), the complete transaction effecting dissaving.

3. *Consumers would* BUY *from salable assets the commodities otherwise bought on credit, and would* SPEND *on consumption the sums otherwise needed to meet instalment payments.* If this behavior is typical, new credits have no effect on saving, but repayments cause saving, the complete transaction effecting an increase in saving.

4. *Consumers would* BUY *from salable assets the commodities otherwise bought on credit, and would* SAVE *the sums otherwise needed to meet instalment payments.* If this behavior is typical, saving is not affected by either new credits or repayments, the complete transaction differing from a cash transaction only in that the consumers increase and decrease their liabilities rather than deplete and accumulate their assets.

These four possibilities carry important implications with respect to total consumer expenditure; moreover, if we assume that the expansion and contraction of credit have no repercussions on the supply of credit for other purposes (if we assume that credit is not of the transfer type), these implications hold also for aggregate (consumer plus producer) expenditure. These implications play an important role in Chapter 3.

In the *first* case consumer expenditure is increased by the amount of new credits and decreased by the amount of repayments. Hence if this case is regarded as typical, net credit change measures the net contribution of instalment credit to consumer expenditure. Credit has a stimulating effect so long as net credit change is positive (outstandings grow) and a depressing effect so long as net credit change is negative (outstandings decline).

In the *second* case consumer expenditure is increased by the amount of new credits but is not affected by repayments. The net contribution to consumer expenditure is thus measured by new credits. Credit stimulates so long as new credits are granted, and its stimulating force rises and falls with the rise and fall in the volume of new credits.

In the *third* case consumer expenditure is not affected by new credits but is decreased by the amount of repayments. The net contribution to consumer expenditure is thus measured by repayments. Credit exerts a depressing influence so long as repayments are made, and the force of its depressing influence rises and falls with the rise and fall in the volume of repayments.

In the *fourth* case consumer expenditure is not affected by either new credits or repayments. Credit has no effect at all; it is neither stimulating nor depressing.

There are, of course, intermediate possibilities in addition to these four standard cases. In the text the first case was accepted as the most realistic, but with possible qualifications in the direction of the third and fourth cases: some consumers would buy anyway (perhaps a cheaper version), and some would save a part of the sums otherwise required for instalment payments.

There is still another possibility, however, which cannot be classed as belonging in an intermediate position but must be regarded as a *fifth* case: in the absence of credit consumers might first save[16] the necessary amount and then buy for cash (dissaving). Under the credit system the order of events is different, dissaving preceding saving. If we assume that the accumulation of cash under the cash system would be effected in precisely the same time span as the amortization of the loan under the credit system, it follows that in this, as in the first case, the complete credit transaction effects no change in consumer saving. There is, however, a significant difference: whereas in the first case the durable good would not be bought, if credit were not available, in the present case it would be bought just the same, although somewhat later. Hence in neither case does a change occur in the long-run ratio of consumer saving and consumption, but in the first case credit brings about a shift in

[16] It may be remarked that Professor Schumpeter expressly excludes from saving cash accumulated for the purpose of buying a consumer good, durable or otherwise (see his *Business Cycles*, vol. 1, 1939, p. 76). It seems clear, however, that from the point of view of the period during which the sum is assembled (but not yet spent) it makes no difference whether the individual who accumulates the money expects, for example, to spend it later on an automobile (which is not saving according to Schumpeter) or on a truck to be used in business (which is saving). It may well be that the individual will change his mind before he spends the money.

demand from non-durable to durable goods, while in the fifth case it does not.

The implications of the fifth case for the short-run fluctuations in consumer expenditure differ from those of the first case. In the fifth case repayments do not constitute a deduction from consumer expenditure. New credits cause an advance of consumer expenditure on durable goods by the full length of the contract period. It follows that in this case instalment credit has not much influence on consumer expenditure. There is no need, however, to elaborate this in greater detail, for the accumulation of cash in a cash system would not necessarily, or even presumptively, be strictly parallel to the amortization of loans in a credit economy.

SUPPLEMENTARY DATA ON CONSUMER SAVING

The generalizations and assumptions made above, and in Chapter 2, may be tested to some extent by data from the Consumer Expenditures study.[17] The results are not conclusive; they by no means constitute a clear verification of our analysis. But at least they are not at variance with it.

Frequent reference has already been made to this invaluable work, and also to the limitations of its use for the present type of analysis. The most serious of these is that its data refer to only one year, 1935-36, and refer only to change in debt or savings, providing no information on the amount of accumulated savings or of instalment debt outstandings. It should be noted also that the special sample used here is a relatively small one; it consists of some 3,000 family expenditure schedules tabulated with special reference to savings, and of these about 600 indicated a net change in instalment debt. The sample was drawn only from small cities in the East Central region.

In the Consumer Expenditures study savings are defined as the net change in assets and liabilities during the year, exclusive of gains or losses resulting from the revaluation of assets. Changes in assets include all purchases and sales of capital assets, both tangible and intangible, and also changes in cash on hand and in banks. Amounts due on instalment debt are treated as liabilities, and increases (decreases) in such debt during the schedule year are included in liabilities (assets). Capital assets include houses, improvements on houses and capital goods used for business purposes. Durable consumer goods other than houses, such

[17] National Resources Committee, *Consumer Expenditures in the United States* (1939).

as furniture and automobiles and repairs on houses, are excluded.[18] Hence the definition of savings used in the Consumer Expenditures study is precisely the same as that used in the present volume—the narrower of the two definitions distinguished above. In the following discussion the term "families having a surplus" refers to those who saved, according to our terminology, and "families having a deficit" refers to those who dissaved, during the year 1935-36.

It is important to note that a family reporting a surplus, that is, positive saving, may have had either an increase in assets or a decrease in liabilities. Thus families counted as having a surplus may actually have been in debt at the end of the year, and families reporting a deficit, that is, negative saving (dissaving) may have had an increase in liabilities or a decrease in assets and may actually have had securities or money in the bank.

In Chapter 2 it was said that people who save probably do not at the same time incur instalment debt, though for special reasons this may sometimes happen. If that reasoning is correct we should expect the percentage of savers to be smaller among families increasing instalment debt than among the population as a whole. This is exactly what is indicated by the Consumer Expenditures data in Tables A-1 and A-3. Table A-1 shows that over three-fifths of the families that increased instalment obligations had a net deficit (decrease in net worth), that is to say, dissaved during the year. It is true that almost two-fifths of the debt-increasing families had net savings during the year despite their increased instalment debt liabilities. But this proportion is much smaller—in each income level as well as in all levels combined—than the comparable figure for *all* non-relief families. Table A-3 indicates that 65 percent of all families had a surplus and only 28 percent had a deficit.

We should also expect that a disproportionately large number of families that decrease instalment debt would have savings. This surmise is borne out by the fact that 85 percent of such families reported a surplus and only 15 percent reported a deficit for the period (Table A-2). In every income class except the $3000-4000 group the percentage of families having a surplus was higher, and the percentage of families having a deficit was smaller, among families that decreased instalment obligations than among all non-relief families.

[18] Life insurance, annuity and endowment policies are counted as assets, and all premiums paid on them are included under savings, no deduction being made for that part of the premium payment which might be treated as current expense for protection.

TABLE A-1

DEBT AND SAVINGS DATA ON NON-RELIEF FAMILIES THAT INCREASED THEIR INSTALMENT DEBT DURING THE YEAR 1935-36, BY INCOME LEVEL[a]

Income Level	Debt-Increasing Families Reporting a Net Surplus[b]				Debt-Increasing Families Reporting a Net Deficit[c]			
	Percent of Families Having a Net Surplus	Average Increase in Instalment Debt	Average Surplus (with debt increase counted)	Average Surplus (with debt increase not counted)	Percent of Families Having a Net Deficit	Average Increase in Instalment Debt	Average Deficit (with debt increase counted)	Average Deficit (with debt increase not counted)
$ 500– 750	20.0%	$ 25	$ 42	$ 67	80.0%	$109	$168	$59
750–1000	23.1	28	38	66	76.9	83	181	98
1000–1250	35.1[d]	44	87	131	63.6[d]	138	170	32
1250–1500	29.2[d]	104	120	224	69.4[d]	186	277	91
1500–1750	34.4	82	169	251	65.6	217	241	24
1750–2000	50.0	118	213	331	50.0	205	234	29
2000–2250	58.6	70	266	336	41.4	371	335	(36)[e]
2250–2500	55.6	143	286	429	44.4	317	320	3
2500–3000	37.9	109	442	551	62.1	211	300	89
3000–4000	66.7	138	586	724	33.3	252	289	37
ALL LEVELS	38.3[d]	86	211	297	61.2[d]	173	227	54

[a] Based on National Resources Committee, *Consumer Expenditures in the United States* (1939). The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families, of which 439 increased their instalment debt during the schedule year 1935-36.
[b] A net surplus results from an increase in assets or a decrease in liabilities.
[c] A net deficit results from a decrease in assets or an increase in liabilities.
[d] A small proportion of the debt-increasing families had no change in assets and liabilities.
[e] Surplus rather than deficit.

TABLE A-2

DEBT AND SAVINGS DATA ON NON-RELIEF FAMILIES THAT DECREASED THEIR INSTALMENT DEBT DURING THE YEAR 1935-36, BY INCOME LEVEL[a]

Income Level	*Debt-Decreasing Families Reporting a Net Surplus*[b]				*Debt-Decreasing Families Reporting a Net Deficit*[c]			
	Percent of Families Having a Net Surplus	Average Decrease in Instalment Debt	Average Surplus (with debt decrease counted)	Average Surplus (with debt decrease not counted)	Percent of Families Having a Net Deficit	Average Decrease in Instalment Debt	Average Deficit (with debt decrease counted)	Average Deficit (with debt decrease not counted)
$ 500– 750	50.0%	$ 54	$103	$ 49	50.0%	$ 51	$341	$392
750–1000	83.3	90	68	(22)[d]	16.7	96	124	220
1000–1250	82.9	80	141	61	17.1	49	110	159
1250–1500	80.6	80	166	86	19.4	59	123	182
1500–1750	86.7	131	271	140	13.3	134	354	488
1750–2000	84.2	129	255	126	15.8	66	87	153
2000–2250	88.9	155	393	138	11.1	56	269	325
2250–2500	100.0	119	353	234	0.0	—	—	—
2500–3000	90.0	124	490	366	10.0	370	260	630
3000–4000	88.9	251	994	743	11.1	50	950	1000
ALL LEVELS	85.0	115	282	167	15.0	83	220	303

[a] Based on National Resources Committee, *Consumer Expenditures in the United States* (1939). The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families, of which 173 decreased their instalment debt during the schedule year 1935-36.

[b] A net surplus results from an increase in assets or a decrease in liabilities.

[c] A net deficit results from a decrease in assets or an increase in liabilities.

[d] Deficit rather than surplus.

TABLE A-3

PERCENTAGE DISTRIBUTION OF NON-RELIEF FAMILIES REPORTING A NET SURPLUS, A NET DEFICIT OR NO CHANGE IN ASSETS AND LIABILITIES, DURING THE YEAR 1935-36, BY INCOME LEVEL[a]

Income Level	*Reporting a Surplus*[b]	*Reporting a Deficit*[c]	*Reporting No Change*	*Total*
$ 500– 750	31.0%	53.3%	15.7%	100.0%
750–1000	41.6	43.3	15.1	100.0
1000–1250	56.7	33.3	10.0	100.0
1250–1500	64.7	29.4	5.9	100.0
1500–1750	69.1	27.1	3.8	100.0
1750–2000	76.9	18.5	4.6	100.0
2000–2250	79.1	16.3	4.6	100.0
2250–2500	82.8	16.0	1.2	100.0
2500–3000	82.9	14.6	2.5	100.0
3000–4000	94.0	5.5	.5	100.0
ALL LEVELS	64.6	28.2	7.2	100.0

[a] Based on National Resources Committee, *Consumer Expenditures in the United States* (1939). The data pertain to non-relief families living in small cities in the East Central region. The sample consisted of about 3,000 families.
[b] A net surplus results from an increase in assets or a decrease in liabilities.
[c] A net deficit results from a decrease in assets or an increase in liabilities.

Unfortunately, however, these figures are subject to certain qualifications which weaken the argument considerably. As previously indicated, in the Consumer Expenditures study positive and negative savings (surplus and deficit) are defined to include changes in instalment debt: instalment debt increases are negative savings and instalment debt decreases are positive savings. For the purposes of the present discussion, however, changes in instalment debt should not be counted in computing savings, since we wish to know what proportion of families had savings (other than instalment debt changes) for which the use of instalment credit might have been a substitute. The available material does not permit a calculation of such proportions, but it does permit a calculation, for each income level, of the average amount of positive or negative savings, exclusive of debt changes. These figures, too, are shown in Tables A-1 and A-2.

When increases in instalment debt are eliminated from the net worth figures the savings (surplus) figures are higher and those for deficits are lower. Therefore the exclusion of instalment-debt increases cannot shift a family from the surplus to the deficit group, but it may very well shift a family from the deficit to the surplus group. It probably does not do this to any great extent, however, for as can be seen in Table A-1 there is only one income level in which the shift was great enough to transform the average deficit into an average surplus. Thus, while there is scarcely a doubt that among debt-increasing families the proportion of dissavers would be lower, if debt increases were not counted in calculating surplus or deficit, and the proportion of savers would be higher, it seems reasonable to believe that for the majority of families increased instalment debt would still be accompanied by other types of dissaving.

In regard to the families that decreased their instalment debt the situation is similar. When their debt decreases are not counted their savings figures are lower, but only in one income level does this adjustment transform the average surplus into an average deficit. Thus it appears that most of the families in the "surplus" group had net savings even without counting their decrease in instalment debt; in this case it would still remain true that the majority of debt-decreasing families were savers.

In view of these considerations it seems reasonable to believe that the elimination of instalment-debt changes from saving, while it weakens the argument, does not destroy it. From what we can see from these data, this adjustment does not cause strong enough shifts to nullify the finding that among debt-increasing families there is a lower percentage of savers, and a higher percentage of dissavers, than among all families.

Two further factors that may weaken the proof value of the present data should be pointed out. The first is that life insurance premiums are counted as savings. If they were not so counted some of the families now in the savers group might shift to the dissavers. It may be mentioned, however, that between a life insurance premium payment and instalment debt there is not the same freedom of choice as exists between instalment debt and cash savings, purchase of securities and the like. The second consideration is that the high percentage of dissavers among the debt-increasing families may be due, at least in part, to the fact that down payments on durable consumer goods are by definition regarded as dissaving.

Unfortunately it is not possible to evaluate quantitatively the importance of these detracting factors. We must be content that the statistical evidence is at least not in contradiction to *a priori* considerations.

APPENDIX B

A Mathematical Analysis of the Relationship of New Credits, Total Credits Outstanding and Net Credit Change

A Mathematical Analysis of the Relationship of New Credits, Total Credits Outstanding and Net Credit Change

IN ORDER to make the problem determinate it is assumed that all new contracts contain the same terms, and provide for amortization of the loan according to some definite pattern. As successive payments are made the total discounted value of the remaining future payments falls off. Let p(a) be the fraction of the initial value of the contract which remains at *a* units of time after the contract was made. At the beginning of the period this must be equal to unity, and after some finite time, n, no value remains. Therefore

$$\begin{aligned} p(0) &= 1 \\ p(a) &\equiv 0, \quad a \geqq n \end{aligned}$$

If the terms of the contract call for amortization of the loan at a constant rate per unit of time, so that value falls off linearly, we have

$$\begin{aligned} p(a) &= 1 - \frac{a}{n}, \quad a \leqq n \\ &= 0 \quad\ \ , \quad a \geqq n \end{aligned} \tag{1}$$

This is the case considered in the text. Usually, however, contracts call for instalment payments of equal magnitude. Since each instalment covers both reduction of the value of the loan and interest on the outstanding balance, this requires that the rate of amortization of the loan be small at first when interest charges are large. As the value falls off, interest charges decrease so that amortization may proceed ever more rapidly. Actually we must have

$$\begin{aligned} p(a) &= \frac{(1+i)^n - (1+i)^a}{(1+i)^n - 1}, \quad a \leqq n \\ &\equiv 0, \qquad\qquad\qquad\qquad\quad a \geqq n \end{aligned} \tag{2}$$

where i is the rate of interest per unit of time.[1] In the limit, as the

[1] This formula is derived as follows. The amount by which value is reduced plus interest charges on outstanding balances must equal a constant, or

interest rate becomes negligible, this "sinking fund" formula reduces to the straight line amortization formula given above.[2] In the accompanying Chart B-I examples of the straight line and sinking fund formulas are shown.

Unless statement is made to the contrary, the present analysis makes no special assumptions concerning the amortization function p(a) except that it can never be increasing. For some purposes it is convenient to consider only discrete intervals of time so that *a* ranges over integral values exclusively. In such cases the continuous function p(a) can be replaced by the discrete series

$$p_o(=1),\ p_1,\ p_2,\ \cdots,\ p_j,\ \cdots,\ p_n,\ 0,\ \cdots$$

At any time, t, the total volume of outstanding credits, O_t, equals the sum of credits of all ages; that is, new credits plus credits left from the previous period, plus credits left from two periods back, . . . , plus credits from n periods back. Hence

$$\begin{aligned} O_t &= 1\cdot c_t + p_1c_{t-1} + p_2c_{t-2} + \cdots + p_nc_{t-n} \\ &= \sum_0^n p_jc_{t-j} \end{aligned} \tag{3}$$

where c_t, c_{t-1}, . . . represent respectively new credits at time t, t − 1, . . . The net change in outstanding credits is equal to the volume of new credits minus repayments, or

$$\begin{aligned} O_t - O_{t-1} &= c_t - (p_o - p_1)c_{t-1} - (p_1 - p_2)c_{t-2} - \cdots \\ &\quad - (p_{n-1} - p_n)c_{t-n} - (p_n - 0)c_{t-1-n} \\ &= c_t - \sum_0^n w_jc_{t-1-j} \end{aligned} \tag{4}$$

where w_o, w_1, $\cdots$, w_n represent respectively $(p_o - p_1)$, $(p_1 - p_2)$,

[2] In the limit this becomes an indeterminate form which must be evaluated by L'Hospital's rule as follows:

$$\lim_{i\to 0} \frac{(1+i)^n - (1+i)^a}{(1+i)^n - 1} = \frac{0}{0} = \frac{\lim\limits_{i\to 0} n(1+i)^{n-1} - a(1+i)^{a-}}{\lim\limits_{i\to 0} \quad n(1+i)^{n-1}}$$

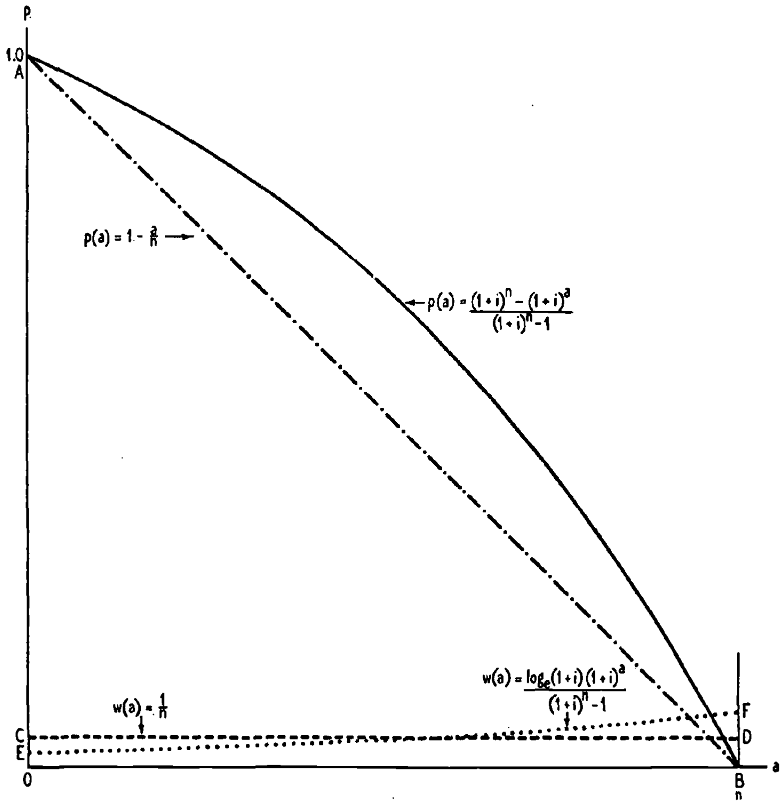
$$= \frac{n-a}{n} = 1 - \frac{a}{n}$$

$-p'(a) + rp(a) = c$, where $r = \log_e(1 + i)$ is the force of interest. This differential equation plus the boundary conditions that $p(0) = 1$ and $p(n) = 0$, determine the function written above.

In the case of discrete time periods we have, instead of a differential equation, the difference equation $-\Delta p_j + ip_j = c$, where $\Delta p_j = p_{j+1} - p_j$. This leads to the same final equation, now defined only for the integral values of a.

CHART B-I

THE "STRAIGHT LINE" AND "SINKING FUND" AMORTIZATION FUNCTIONS



. . . , $(p_n - p_{n+1})$. Since the value of each contract decreases with time, each of the w's is positive. Moreover,

$$\sum_{0}^{n} w_j = 1 - p_1 + p_1 - p_2 + p_2 - \cdots - p_n + p_n - 0 + 0 \cdots$$
$$= 1$$

Therefore the second expression on the right-hand side of equation 4 represents a weighted average of new credits over the previous n + 1 periods. This fact will aid in the determination of lags between the two series.

As an alternative to equation 3, total credits outstanding can be expressed as the difference between new credits cumulated from some date and repayments cumulated from the same date, plus outstanding credits at the date from which cumulation is made.

$$O_t = O_m + C_t - \sum_{0}^{n} w_j C_{t-1-j} \tag{5}$$

where C_t represents the new credits cumulated from m until t as follows:

$$C_t = c_{m+1} + c_{m+2} + \cdot \cdot \cdot + c_{t-1} + c_t = \sum_{m+1}^{t} c_k \tag{6}$$

In the continuous case, when $p = p(a)$ and $-p'(a) = w(a)$, we have corresponding to equations 3, 4, 5 and 6

$$O(t) = \int_0^n p(a)\, c(t - a)\, da \tag{3'}$$

$$O'(t) = c(t) - \int_0^n w(a)\, c(t - a)\, da = \int_0^n p(a)\, c'(t - a)\, da \tag{4'}$$

$$O(t) = O(m) + C(t) - \int_0^n w(a)\, C(t - a)\, da \tag{5'}$$

$$C(t) = \int_m^t c(v)\, dv \tag{6'}$$

Integration and differentiation take the place of summation and differencing.

From a consideration of the above relations the following generalizations can be readily deduced. (a) If new credits are always constant, so will be outstanding credits. (b) If new credits always increase (decrease) linearly, so will outstanding credits; a similar theorem holds if new credits follow any polynomial law. (c) An exponential rate of increase in new credits will result in the same exponential rate of increase in outstanding credits. (d) A monotonically increasing (decreasing) new credits series will result in an ever-increasing (decreasing) series of outstanding credits. (e) If new credits vary periodically, so also will outstanding credits, and with the same period.

These theorems admit of simple mathematical proof. In what follows, unprimed small Greek letters will represent constants characteristic of new credits, and primed Greek letters will represent corresponding constants typifying total outstanding credits.

(a) When $c(t) \equiv \alpha$

$$O(t) \equiv \alpha \int_0^n p(a)da = \alpha'$$

(b) When $c(t) \equiv \beta + \gamma t$

$$O(t) = \int_0^n (\beta + \gamma t - \gamma a)p(a)da = \beta' + \gamma' t$$

$$\text{where } \beta' = \beta \int_0^n p(a)da - \gamma \int_0^n ap(a)da$$

$$\text{and } \gamma' = \gamma \int_0^n p(a)da$$

(c) When $c(t) \equiv \delta e^{rt}$

$$O(t) = \delta \int_0^n e^{rt}e^{-ra}p(a)da = \delta' e^{rt}$$

$$\text{where } \delta' = \delta \int_0^n e^{-ra}p(a)da$$

(d) When $c'(t) > 0$

$$O'(t) = \int_0^n p(a)c'(t - a)da > 0$$

since $p(a) > 0$

(e) If $c(t) \equiv c(t - \theta)$

$$O(t) = \int_0^n p(a)c(t - a)da = \int_0^n p(a)c(t - \theta - a)da = O(t - \theta)$$

All of the above theorems have assumed that new credits follow the above laws for all time. Actually, if new credits follow such a law only after some time, say t^o, the above theorems will hold for outstanding credits after time $t^o + n$; that is, with a lag equal to the maximum length of the contract.

A further generalization can be made concerning the relation between the mean of the new credits series and the mean of the total outstanding credit series. From the well-known statistical theorem that the mean of a sum is equal to the sum of the means, we have

$$\overline{O} = \sum_0^n p_j \bar{c}_{t-j} \tag{7}$$

where $\overline{O}$ represents the mean of outstanding credits, and $\bar{c}_{t-j}$ is the mean of new credits lagged j periods. Aside from a minor adjustment at the ends of the statistical series, each of the respective different series $c_t, c_{t-1}, \cdots, c_{t-j}, \cdots$ contains the same terms, differing only by a time lag. Hence each has the same mean equal to $\bar{c}$. Therefore,

$$\overline{O} = \bar{c} \sum_0^n p_j \tag{8}$$

Because of the linearity of the relation between O and c, relations similar to those in equations 3, 4 and 5 hold between the deviations from the trend of O and the trend deviations of c. Let us write

$$c_t = c_t' + c_t'' \tag{9}$$

where c_t' = trend value of new credits, and c_t'' = deviations from trend. Then

$$O_t = O_t' + O_t'' \tag{10}$$

where

$$O_t' = \sum_0^n p_j c_{t-j}'$$

$$O_t'' = \sum_0^n p_j c_{t-j}''$$

For the most part we can omit considerations of trend, and deal only with deviations from trend. These will form a quasi-periodic oscillatory series. In the text it is stated that the amplitude of fluctuation of outstanding credits is less than that of new credits. This can now be proved. As a measure of amplitude, the standard deviations of the respective series suggest themselves. These are not entirely satisfactory since the amount of new credits per unit of time depends upon the length of the time unit and is not dimensionally comparable with total credits outstanding. But if we divide each standard deviation by the mean of the corresponding series, units are standardized and a valid measure of amplitude is derived.

The O series is a linear sum of the c series. By a well-known statistical theorem the square of its standard deviation can be written

$$\sigma_o^2 = \sum_0^n \sum_0^n p_j p_k \sigma_{c_{t-j}} \sigma_{c_{t-k}} r_{c_{t-j},\, c_{t-k}} \tag{11}$$

where $r_{c_{t-j},\, c_{t-k}}$ represents the serial correlation coefficient between new credits lagged j and k units respectively. Aside from terminal adjustments the respective series c_t, c_{t-1}, . . . contain the same terms and have a common standard deviation, σ_c. Therefore

$$\sigma_o^2 = \sigma_c^2 \sum_0^n \sum_0^n p_j p_k r_{c_{t-k},\, c_{t-j}} < \sigma_c^2 \sum_0^n \sum_0^n p_j p_k \tag{12}$$

since some of the correlation coefficients will be less than unity. But

$$\left(\frac{\sigma_o}{\overline{O}}\right)^2 = \frac{\sigma_o^2}{\bar{c}^2 (\sum_0^n p_j)^2} = \frac{\sigma_o^2}{\bar{c}^2 \sum_0^n \sum_0^n p_j p_k} < \left(\frac{\sigma_c}{\bar{c}}\right)^2 \tag{13}$$

Thus our theorem is proved. It could also be shown that the net change in outstanding credit expressed in standard units is a weighted average of net changes in new credits also expressed in standard units. Hence the changes in outstanding credits will be less extreme than those of the new credits series.

We now consider the timing of the respective series. No restriction is placed upon the series of new credits except that its oscillations should be fairly simple; more specifically, its peaks and troughs should always be separated by a zero value of the series (a trend value of the unadjusted series). Let U_c, L_c, T_c represent respectively upper turning points, lower turning points, and trend or zero values. The series need not be perfectly regular or symmetric, but we must have the following succession: . . . $U_c\ T_c\ L_c\ T_c\ U_c\ T_c\ L_c$ . . . Continuous rather than discrete series are investigated.

No restrictions are placed upon the form of the amortization function p(a) except that the maximum length of the contract must be less than the distance between both successive trend values and successive turning points. (For a regular and symmetric cycle, such as a sine curve, this means that the maximum length of the contract must not exceed one-half the length of a complete cycle.)

Under these mild conditions the following definite theorem can be enunciated: *the peaks and troughs of total credits outstanding will lag behind the respective peaks and troughs of the new credits series; the lag of the turning points cannot, however, be larger than the interval between such a turning point and the succeeding trend value.* Thus the O series will have a maximum after the new credits series has begun to fall but before it reaches its zero or trend value. For a regular and symmetric series the time lag cannot exceed one-fourth the length of a complete cycle.

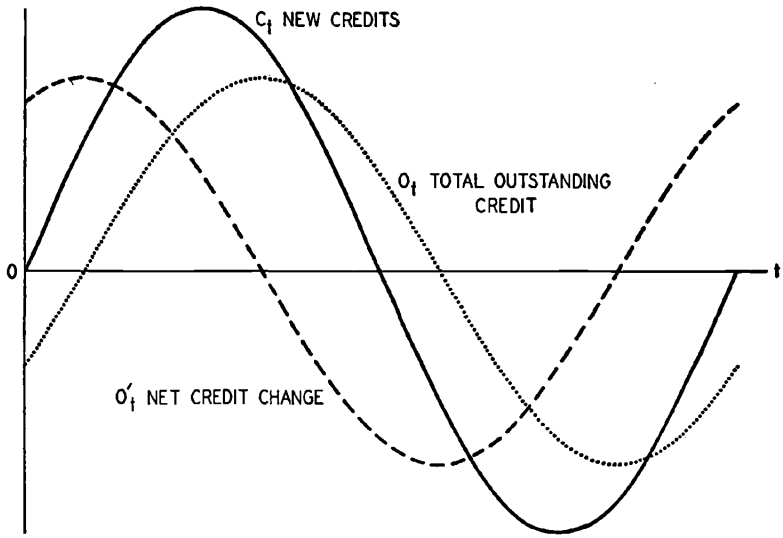
Employing analogous notation for the turning points and trend values of the O series, we must have the following timing relations:

$$\begin{array}{ccccccccccccccc} U_c & & T_c & & L_c & & T_c & & U_c & & T_c & & L_c & & T_c \\ & U_O & & & & L_O & & & & U_O & & & & L_O & \end{array}$$

That outstanding credit must be rising when new credits are at a peak follows from the fact that new credits are increasing monotonically in the previous interval. When new credits are equal to zero (at the trend value), repayments are still positive because new credits were necessarily positive in the previous interval. Therefore when new credits are at the trend value, outstanding credits are falling. Hence at some intermediate point a maximum must have been reached. A similar argument holds for a minimum.

A few further generalizations can be made. If the new credits series is symmetrical around its turning points or trend values, the respective lags cannot exceed one-half the maximum length of the contract. In considering different types of contracts it will be found that those which provide for rapid amortization during the early life of the contract will be characterized by shorter lags at the turning points, other things being equal. The sharpness of the new credits peaks and troughs does not seem to affect the lag so much as the skewness at the peak; that is, the more rapidly new credits fall off

CHART B-II
IDEAL RELATIONSHIP OF NEW CREDITS, TOTAL OUTSTANDING CREDIT AND NET CREDIT CHANGE[a]



[a] All three curves represent deviations from trend values of the variables.

compared to the rise approaching the peak, the sooner will the outstanding credit series turn down.

For many problems it is important to know the relationship between new credits and the rate of change of outstanding credits (net credit change). This turns out to be precisely the same formal relationship as the acceleration principle postulates between the rate of increase of consumption and net investment. Ordinarily the turning points of new credits lag *behind* the turning points of net credit change, just as the acceleration principle requires gross investment to fall *after* consumption has failed to maintain its rate of increase. The above statement has never been adequately substantiated in the literature. It is certainly true for sine curves and symmetric regular periodic curves; and if some special assumptions are made concerning amortization (replacement), it will hold for all possible behavior of the curves. But it is not valid in all conceivable cases.

All of the propositions enunciated previously are strictly true under the hypotheses assumed. In particular, the maximum length of contract has been assumed never to exceed the length of the cycle in new credits. If we are considering short cycles (such as seasonal fluctuations in new credits) or goods of extreme durability (such as housing), this may involve a serious restriction. Empirical experimentation with hypothetical examples suggests that in a wide variety of cases the turning points of outstanding credits will follow those of new credits by considerably less than a quarter cycle, even when the maximum length of contract greatly exceeds the length of the cycle. If, however, the new credits series is quite oscillatory, with many maxima and minima, it is likely that the outstanding credit series—because it "averages out" fluctuations in new credits—may have fewer maxima and minima than new credits.

In Chart B-II is depicted the typical relationship of new credits, total outstanding credit and net credit change, when new credits vary according to a perfect sine curve and when the contract calls for straight line amortization over a period equal to one-fourth of the cycle. The lag of outstandings behind new credits is approximately one-twelfth of the total cycle. Net credit change leads total outstanding credit by one-fourth of the cycle, and leads new credits by about one-sixth of the cycle.

Paul A. Samuelson

APPENDIX C

Texts of Documents Regarding Government Regulation of Consumer Instalment Credit

Texts of Documents Regarding Government Regulation of Consumer Instalment Credit

EXECUTIVE ORDER NO. 8843

REGULATION OF CONSUMER CREDIT

DECLARATION OF NECESSITY AND PURPOSE

WHEREAS a large volume of credit is being devoted to financing and refinancing purchases of consumers' goods and services through extensions of credit that usually are made to individuals and to a large extent are on an instalment payment basis; and

WHEREAS the conditions under which such credit is available have an important influence upon the volume and timing of demand, not only for the particular goods and services purchased on credit but also for goods and services in general; and

WHEREAS liberal terms for such credit tend to stimulate demand for consumers' durable goods the production of which requires materials, skills, and equipment needed for national defense; and

WHEREAS the extension of such credit in excessive volume tends to generate inflationary developments of increasing consequence as the limits of productive capacity are approached in more and more fields and to hinder the accumulation of savings available for financing the defense program; and

WHEREAS the public interest requires control of the use of instalment credit for financing and refinancing purchases of consumers' durable goods the production of which absorbs resources needed for national defense, in order (a) to facilitate the transfer of productive resources to defense industries, (b) to assist in curbing unwarranted price advances and profiteering which tend to result when the supply of such goods is curtailed without corresponding curtailment of demand, (c) to assist in restraining general inflationary tendencies, to support or supplement taxation imposed to restrain such tendencies, and to promote the accumulation of savings available for financing the defense program, (d) to aid in creating a backlog of demand for consumers' durable goods, and (e) to restrain the development of a consumer debt structure that would repress effective demand for goods and services in the post-defense period; and

WHEREAS in order to prevent evasion or avoidance of this order and such regulations as may be prescribed to effectuate its purposes, means should also be available for regulating the use of other instalment credit and other forms of credit usually extended to consumers or on consumers' durable goods; and

WHEREAS it is appropriate that such credit be controlled and regulated through an existing governmental agency which has primary responsibilities with respect to the determination and administration of national credit policies:

Now, THEREFORE, by virtue of the authority vested in me by section 5(b) of the act of October 6, 1917, as amended, and by virtue of all other authority vested in me, and in order, in the national emergency declared by me on May 27, 1941, to promote the national defense and protect the national economy, it is hereby ordered as follows:

ADMINISTRATION

Section 1. (*a*) The Board of Governors of the Federal Reserve System (hereinafter called the Board) is hereby designated as the agency through which transfers of credit between and payments by or to banking institutions (as defined herein pursuant to section 5(b) of the aforesaid Act) which constitute, or arise directly or indirectly out of, any extension of credit of a type set out in section 2(a) of this order shall be investigated, regulated and prohibited.

(*b*) The Board shall, whenever it deems such action to be necessary or appropriate, take any lawful steps herein authorized and such other lawful steps as are within its power to carry out the purposes of this order, and may, in administering this order, utilize the services of the Federal Reserve Banks and any other agencies, Federal or State, which are available and appropriate.

(*c*) In order to facilitate the coordination of the Board's functions under this order with other phases of the program for national defense and for protecting the national economy, there shall be a committee consisting of the Secretary of the Treasury, the Federal Loan Administrator, and the Administrator of the Office of Price Administration and Civilian Supply, or such alternate as each shall designate, and such other members as the President shall subsequently appoint. The Board shall maintain liaison with the committee, and in formulating policies with respect to down-payments, maturities, terms of repayment, and other such questions of general policy shall consult with the committee and take into consideration any suggestions or recommendations it may make.

REGULATIONS

Section 2. (*a*) Whenever the Board shall determine that such action is necessary or appropriate for carrying out the purposes of this order, the Board shall prescribe regulations with respect to transfers and payments which constitute, or arise directly or indirectly out of, any extension of instalment credit for the purpose of purchasing or carrying any consumers' durable good except a residential building in its entirety; and the Board may in addition, to the extent deemed by it to be desirable and feasible in order to prevent evasion of such regulations as may be so prescribed or in order to control forms of credit the use of which might defeat the purposes of this order and such regulations, prescribe regulations with respect to transfers and payments which constitute, or arise directly or indirectly out of, (1) any other extension of instalment credit, or (2) any other extension of credit for the purpose of purchasing or carrying any consumers' durable good, or (3) any other extension of credit in the form of a loan other than a loan made for business purposes to a business enterprise or for agricultural purposes to a person engaged in agriculture. Such regulations may be prescribed by the Board at such times and with such effective dates as the Board shall deem to be in accordance with the purposes of this order.

(*b*) Such regulations may from time to time, originally or by amendment, regulate or prohibit such transfers and payments or exempt them from regulation or prohibition and may classify them according to the nature of the transactions or goods or persons involved or upon such other basis as may reasonably differentiate such transfers and payments for the purposes of regulations under this order, and may be made applicable to one or more of the classes so established; and, without limiting the generality of the foregoing, such regulations may require transactions or persons or classes thereof to be registered or licensed; may prescribe appropriate limitations, terms, and conditions for such registrations or licenses; may provide for suspension of any such registration or license for violation of any provision thereof or of any regulation, rule, or order prescribed hereunder, may prescribe appropriate requirements as to the keeping of records and as to the form, contents, or substantive provisions of contracts, liens, or any relevant documents; may prohibit solicitations by banking institutions which would encourage evasion or avoidance of the requirements of any regulation, license, or registration under this order; and may from time to time make appropriate provisions with respect to—

(1) The maximum amount of credit which may be extended on, or in connection with any purchase of, any consumers' durable good;

(2) The maximum maturity, minimum periodic payments, and maximum periods between payments, which may be stipulated in connection with extensions of credit;

(3) The methods of determining purchase prices or market values or other bases for computing permissible extensions of credit or required down-payments; and

(4) Special or different terms, conditions, or exemptions with respect to new or used goods, minimum original cash payments, temporary credits which are merely incidental to cash purchases, payment or deposits usable to liquidate credits, and other adjustments or special situations.

(*c*) On and after the effective date of any regulation prescribed by the Board with respect to any extension of credit of a type set out in section 2(a), and notwithstanding the provisions of any other proclamation, order, regulation, or license under the aforesaid Act, all transfers and payments which are in violation of such regulation shall be and hereby are prohibited to the extent specified in such regulation.

(*d*) Neither this order nor any regulation issued thereunder shall affect the right of any person to enforce any contract, except that after the effective date of any such regulation every contract which is made in connection with any extension of credit and which violates, or the performance of which would violate, any provision of such regulation (other than a provision designated therein as being for administrative purposes), and every lien, pledge, seller's interest in a conditional sale, or other property interest, subject to the provisions of such contract or created in connection therewith, shall be unenforceable by the person who extends such credit or by any person who acquires any right of such person in such contract; provided that such disability shall not apply to any person who extends such credit, or acquires such right for value, in good faith and without knowing or having reason to know the facts by reason of which the making or performance of such contract was or would be such a violation.

REPORTS

Section 3. Reports concerning the kinds, amounts, and characteristics of any extensions of credit subject to this order, concerning transfers and payments which arise out of any such extensions of credit, or concerning circumstances related to such extensions of credit or such transfers or payments or to the regulation thereof, shall be filed on such forms, under oath or otherwise, at such times and from time to time, and by such persons, as the Board may prescribe by rule, regulation, or order as necessary or appropriate for enabling the Board to perform its functions under this order. The Board may require any person to furnish, under oath or otherwise, complete information relative to any transaction within the scope of this order, including the production of any books of account, contracts, letters, or other papers, in connection therewith in the custody or control of such person.

DEFINITIONS

Section 4. For the purposes of this order, unless the context otherwise requires, the following terms shall have the following meanings, provided that the Board may in its regulations give such terms more restricted meanings:

(*a*) "Person" has the meaning set forth in section 5(b) of the act of October 6, 1917, as amended.

(*b*) "Transfers and payments" means "transfers of credit between and payments by or to banking institutions".

(*c*) "Banking institution" means any person engaged as principal, agent, broker, or otherwise, in the business of making or holding extensions of credit and includes, without limitation, any bank, any loan company, and finance company, or any other person engaged in the business of making or holding extensions of credit whether as a vendor of consumers' durable goods or otherwise.

(*d*) "Consumers' durable good" includes any good, whether new or used, which is durable or semi-durable and is used or usable for personal, family or household purposes, and any service connected with the acquisition of any such good or of any interest therein.

(*e*) "Extension of credit" means any loan or mortgage; any instalment purchase contract, any conditional sales contract, or any sale or contract of sale under which part or all of the price is payable subsequent to the making of such sale or contract; any rental-purchase contract, or any contract for the bailment or leasing of property under which the bailee or lessee either has the option of becoming the owner thereof or obligates himself to pay as compensation a sum substantially equivalent to or in excess of the value thereof; any contract creating any lien or similar claim or property to be discharged by the payment of money; any purchase, discount, or other acquisition of, or any extension of credit upon the security of, any obligation or claim arising out of any of the foregoing; and any transaction or series of transactions having a similar purpose or effect.

(*f*) An extension of credit is an extension of "instalment credit" if the obligor undertakes to repay the credit in two or more scheduled payments or undertakes to make two or more scheduled payments or deposits usable to liquidate the credit, or if the extension of credit has a similar purpose or effect, or if it is for the purpose of financing a business enterprise which makes such extensions of credit.

(*g*) An extension of credit is "for the purpose of purchasing or carrying any consumers' durable good" if it is directly or indirectly for the purpose of financing or refinancing the purchase of any consumers' durable good or is directly or indirectly secured by any consumers' durable good, or if the extension of credit has a similar purpose or effect, or if it is for the purpose of financing a business enterprise which makes such extensions of credit.

PENALTIES

Section 5. Whoever willfully violates or knowingly participates in the violation of this order or of any regulation prescribed hereunder, shall be subject to the penalties applicable with respect to violations of section 5(b) of the said act of October 6, 1917, as amended.*

(Signed) FRANKLIN D. ROOSEVELT.

The White House,
August 9, 1941.

* The section reads in part: "Whoever willfully violates any of the provisions of this subdivision or of any license, order, rule or regulation issued thereunder, shall, upon conviction, be fined not more than $10,000, or, if a natural person, may be imprisoned for not more than ten years, or both; and any officer, director, or agent of any corporation who knowingly participates in such violation may be punished by a like fine, imprisonment, or both."

FOREWORD

[printed with, but not a part of, the regulation]

Regulation W has been adopted by the Board of Governors in order to carry out the President's Executive Order of August 9, 1941, which sets forth the necessity for and purpose of regulation of consumer credit . . . [there follow the seven points constituting the "Declaration of Necessity and Purpose" at the beginning of the Executive Order].

Regulation W is issued in the light of the foregoing considerations and as a step supplementing more fundamental governmental measures designed to combat inflationary developments.

There will be changes from time to time in this regulation, particularly in the list of consumers' durable goods covered by the regulation, in the size of the minimum down payments required, and in the maximum length permitted for instalment contracts.

Any inquiry relating to this regulation should be addressed to the Federal Reserve Bank or the Federal Reserve branch bank of the district in which the inquiry arises.

[Regulation W was adopted August 21, 1941. The following is a reprint of the regulation as amended by Amendment No. 1 (effective September 20, 1941, and referring to Part 3(a) of the Supplement), Amendment No. 2 (effective December 1, 1941, and referring to sections 2(e), 4(e), 5, 6(a), 6(*l*), 8(a), 8(b), 8(c), 8(d), 9(f), 10 of the regulation and Part 4 of the Supplement) and Amendment No. 3 (effective March 23 and April 1, 1942, and referring to sections 3(b), 4(f), 5(d), 6(e), 6(j), 6(k), 8(a), 8(b), 8(d), 9(d), 10 of the regulation and all of the Supplement).]

REGULATION W

CONSUMER CREDIT

SECTION 1. SCOPE OF REGULATION

This regulation is issued by the Board of Governors of the Federal Reserve System (hereinafter called the "Board") under authority of section 5(b) of the Act of October 6, 1917, as amended, and Executive Order No. 8843, dated August 9, 1941 (hereinafter called the "Executive Order").[1]

The regulation applies, in general, to any person who is engaged in the business of making extensions of instalment credit, or of discounting or purchasing obligations arising out of extensions of instalment credit. It applies whether the person so engaged is acting as principal, agent, broker or otherwise, and whether the person is a bank, loan company, or finance company, or a person who is so engaged in connection with any other business, such as by making such extensions of credit as a dealer, retailer, or other person in connection with the selling of consumers' durable goods.[2]

SECTION 2. DEFINITIONS

For the purposes of this regulation, unless the context otherwise requires:

(*a*) **"Person"** means an individual, partnership, association, or corporation.

(*b*) **"Extension of Credit"** means any loan or mortgage; any instalment purchase contract, any conditional sales contract, or any sale or contract of sale under which part or all of the price is payable subsequent to the making of such sale or contract; any rental-purchase contract, or any contract for the bailment or leasing of property under which the bailee or lessee either has the option of becoming the owner thereof or obligates himself to pay as compensation a sum substantially equivalent to or in excess of the value thereof; any contract creating any lien or similar claim on property to be discharged by the payment of money; any purchase, discount, or other acquisition of, or any extension of credit upon the security of, any obligation or claim arising out of any of the foregoing; and any transaction or series of transactions having a similar purpose or effect.

(*c*) **"Extension of Instalment Credit"** means an extension of credit which the obligor undertakes to repay in two or more scheduled payments or as to which the obligor undertakes to make two or more scheduled payments or deposits usable to liquidate the credit, or which has a similar purpose or effect.

(*d*) **"Extension of Instalment Sale Credit"** means an extension of instalment credit which is made, as principal, agent or broker, by any seller of any consumers' durable good specified in the

[1] . . . it has been the purpose to couch this regulation in such terms as will eliminate the need of cross reference to the Order.

[2] The Supplement to this regulation lists the consumers' durable goods within the scope of the regulation.

Supplement to this regulation (hereinafter called a "listed article") and arises out of the sale of such listed article. For the purposes of this section 2(d) a lease or bailment which is similar in purpose or effect to a sale shall be deemed to be a sale.

(*e*) **"Extension of Instalment Loan Credit"** means an extension of instalment credit, other than instalment sale credit, which is a loan (as distinguished from other types of extensions of credit) and which (1) is in a principal amount of $1,500 or less, or (2) regardless of amount, is wholly or partly secured, or according to any oral or written agreement of the parties is to become so secured, by any listed article which has been purchased within 45 days prior to, or is to be purchased at any time after, such extension of instalment credit; but the definition does not include any *loan upon the security of any obligation or claim* which arises out of any extension (A) of instalment sale credit or (B) of instalment loan credit as defined above in this section 2(e).

SECTION 3. REGISTRATION AND GENERAL REQUIREMENTS

(*a*) **General Requirements.**—No person engaged in the business of making extensions of instalment sale credit[3] or instalment loan credit, or engaged in the business of lending on the security of or discounting or purchasing obligations or claims arising out of such extensions of credit, shall make any payment or receive any payment which constitutes or arises directly or indirectly out of any such extension of credit made by such person or out of any such obligation or claim lent on or discounted or purchased by such person, except on the following conditions:

(1) Such person shall be licensed pursuant to this section (any person so licensed being hereinafter called a "Registrant"); and

(2) The Registrant shall not make any such payment or receive any such payment (A) if, when the Registrant made the extension of instalment credit, the Registrant knew or had reason to know any fact by reason of which such extension of instalment credit failed to comply with any of the requirements of this regulation applicable thereto, or (B) if, when the Registrant purchased or discounted the obligation or claim or accepted the obligation or claim as collateral, the obligation or claim showed on its face some failure to comply with such requirements, or the Registrant

[3] It is to be noted that the term "instalment sale credit" includes only credit connected with the sale of listed articles.

knew any fact by reason of which the extension of instalment credit giving rise to the obligation or claim failed to comply with such requirements, or (C) if, when the Registrant renewed, revised, or consolidated the obligation or claim arising out of an extension of instalment credit, the Registrant knew or had reason to know any fact by reason of which such renewal, revision or consolidation resulted in a failure to comply with such requirements.

(b) **General License.**—Whenever this regulation is amended so that any person who was not formerly subject to section 3(a) becomes subject thereto, such person is hereby granted a general license; but such general license shall terminate at the end of the second full calendar month after the month in which the amendment becomes effective unless such person has registered, in the manner provided in section 3(c), before such termination. Any person whose license is not suspended may become licensed by registering in the manner provided in section 3(c).

(c) **Registration.**—Registration as required by this section 3 may be accomplished by filing, with the Federal Reserve Bank of the district in which the main office of the Registrant is located, a registration statement on forms obtainable from any Federal Reserve Bank or branch.

(d) **Suspension of License.**—The license of any Registrant may, after reasonable notice and opportunity for hearing, be suspended by the Board, either in its entirety or as to particular activities or particular offices or for specified periods, on any of the following grounds:

(1) Any material misstatement or omission willfully or negligently made in the registration statement;

(2) Any willful or negligent failure to comply with any provision of this regulation or any requirement of the Board pursuant thereto.

A license which is suspended for a specified period will again become effective upon the expiration of such period. A license which is suspended indefinitely may be restored by the Board, in its discretion, if the Board is satisfied that its restoration would not lead to further violations of this regulation and would not be otherwise incompatible with the public interest.

SECTION 4. INSTALMENT SALE CREDIT

Except as otherwise permitted by section 6, any extension of instalment sale credit shall comply with the following requirements:

(*a*) **Maximum Amount of Credit.**—The deferred balance shall not exceed the maximum credit value of the listed article specified in the Supplement to this regulation (hereinafter called the "Supplement");

(*b*) **Maximum Maturity.**—The maturity shall not exceed that specified for the listed article in the Supplement;

(*c*) **Amounts of Payments.**—Except as permitted by section 4(d), the instalments in which the time balance is repayable shall be substantially equal in amount or be so arranged that no instalment is substantially greater in amount than any preceding instalment;

(*d*) **Intervals of Payments.**—The instalments shall be payable at approximately equal intervals not exceeding one month, except that, when appropriate for the purpose of facilitating repayment in accordance with the seasonal nature of the obligor's main source of income or to encourage off-seasonal purchases of seasonal goods, the payment schedule may reduce or omit payments over any period or periods totaling not more than 4 months during the life of such extension of instalment sale credit if the schedule increases the scheduled payments in such manner as to meet all the other requirements of this section 4;

(*e*) **Small Down Payments.**—In any case in which the down payment required by section 4(a) would be $2.00 or less, the Registrant may disregard such requirement.

(*f*) **Statement of Transaction.**—The extension of instalment sale credit shall be evidenced by a written instrument or record, and there shall be incorporated therein or attached thereto a written statement, of which a copy shall be given to the obligor as promptly as circumstances will permit, and which shall set forth (in any order) the following information:

(1) A brief description identifying the article purchased;

(2) The *bona fide* cash purchase price of the article and accessories purchased (including any sales taxes thereon) and of any services (excluding any interest or finance charge and the cost of any insurance) rendered in connection with the acquisition thereof, itemized;

(3) The amount of the purchaser's down payment (A) in cash and (B) in goods accepted in trade, together with a brief description identifying such goods and stating the monetary value assigned thereto in good faith;

(4) The deferred balance, which is the difference between items (2) and (3);

(5) The amount of any insurance premium for which credit is extended and of any finance charges or interest by way of discount included in the principal amount of the obligation, or the sum of these amounts;

(6) The time balance owed by the purchaser, which is the sum total of items (4) and (5); and

(7) The terms of payment.

The Registrant may disregard the requirements of this section 4(f) in the case of any article listed in Group A, B, C or D on which the down payment required by section 4(a) would be $2.00 or less, or in the case of any article included in Group E of which the *bona fide* cash purchase price, as defined in the Supplement, does not exceed $20.00.

(*g*) **Credit of Which a Part Arises Out of Sale of a Listed Article.**—In case an extension of instalment sale credit arises partly out of a sale of an article listed in the Supplement and partly out of another sale, the amount and the terms of such extension of credit shall be such as would result if the credit were divided into two parts, the part relating to the listed article being treated in accordance with the provisions of this regulation relating to such article and the remainder being treated in the manner in which the Registrant would in good faith treat a similar extension of credit if standing alone.

SECTION 5. INSTALMENT LOAN CREDIT

Except as otherwise permitted by section 6, any extension of instalment loan credit shall comply with the following requirements:

(*a*) **Loans Secured by or to Purchase Listed Articles.**—If the extension of instalment loan credit is secured, or according to any oral or written agreement of the parties is to become secured, by any listed article which has been purchased within 45 days prior to, or is to be purchased at any time after, such extension of instalment loan credit; or if the extension of instalment loan credit, even though not so secured, is in a principal amount of $1,500 or less and the Registrant knows or has reason to know that the proceeds are to be used to purchase any listed article:

(1) The principal amount lent to the obligor (excluding any interest or finance charges, and the cost of any insurance) shall not exceed the maximum credit value of the listed article specified in the Supplement; and, in determin-

ing such maximum credit value, the Registrant may accept in good faith a written statement signed by the obligor setting forth the *bona fide* cash purchase price of the article and of any accessories and of any services, except insurance, rendered in connection with the acquisition thereof, which statement so accepted shall, for purposes of this regulation, be deemed to be correct; and

(2) The maturity shall not exceed that specified for the listed article in the Supplement, and such maximum maturity shall be calculated from the date of purchase of such listed article or from the date of such extension of instalment loan credit, whichever is earlier.

(*b*) **Miscellaneous Loans of $1,500 or Less.**—If the extension of instalment loan credit is not subject to section 5(a) but is in a principal amount of $1,500 or less, the maximum maturity shall not exceed that specified in the Supplement for extensions of instalment loan credit subject to this section 5(b).

(*c*) **General Requirements.**—Whether subject to section 5(a) or section 5(b), the extension of instalment loan credit shall comply with the following additional requirements:

(1) The extension of instalment loan credit shall be evidenced by a written instrument or record, and there shall be incorporated therein or attached thereto a written statement, of which a copy shall be given to the obligor as promptly as circumstances will permit, and which shall set forth the terms of payment and, if the loan is subject to section 5(a), the *bona fide* cash purchase price used for determining the maximum credit value of the listed article involved;

(2) Except as permitted by section 5(c)(3), the total of the principal and any interest or finance charges shall be payable in instalments which shall be substantially equal in amount or be so arranged that no instalment is substantially greater in amount than any preceding instalment; and

(3) Instalments shall be payable at approximately equal intervals not exceeding one month, except that, when appropriate in order to facilitate repayment in accordance with the seasonal nature of the obligor's main source of income or to encourage off-seasonal purchases of seasonal goods, the payment schedule may reduce or omit payments over any period or periods totaling not more than 4 months during

the life of such extension of credit if the schedule increases the scheduled payments in such manner as to meet the other requirements of this section 5.

(*d*) **Statement of the Borrower.**—No Registrant shall make any extension of instalment loan credit (except under the provisions of section 8(a)) unless, at or before the execution of the loan contract, he shall have obtained and accepted in good faith a signed Statement of the Borrower as to the purposes of the loan in form prescribed by the Board. No obligor shall willfully make any material misstatement or omission in such Statement. The Registrant, acting in good faith, may rely upon the facts set out by the obligor in such Statement and, when the Registrant is so acting, such facts shall be deemed to be correct for the purposes of the Registrant. In case the Registrant accepts in good faith a written statement signed by the obligor that any listed article which secures an extension of instalment loan credit has not been purchased within 45 days prior to such extension of credit, such statement shall, for the purposes of this regulation, be deemed to be correct.

(*e*) **Credit Subject to Section 5(a) Only in Part.**—In case an extension of instalment loan credit consists only in part of an extension of credit subject to section 5(a), the amount and terms of such extension of credit shall be such as would result if the credit were divided and each part treated in good faith as if it stood alone.

A loan or part thereof which is secured by a listed article only because of an "overlap agreement," "spreader clause," or other form of general over-all lien or only because the Registrant is prevented by a State law or regulation from having in effect more than one contract of loan from the same borrower at the same time, but which otherwise would not be subject to section 5(a), shall not be deemed to be so secured within the meaning of such section.

(*f*) **Loans to Make Down Payments Prohibited.**—An extension of instalment loan credit does not comply with the requirements of this regulation if the Registrant making such extension knows or has reason to know that any part of the proceeds thereof is to be used to make a down payment on the purchase price of any listed article: *Provided,* That if the Registrant accepts in good faith a written statement signed by the obligor that no part of the proceeds is to be so used, such statement shall, for the purposes of this regulation, be deemed to be correct.

SECTION 6. CERTAIN EXCEPTIONS

Notwithstanding the provisions of sections 4 and 5, the requirements of such sections shall not apply to any of the following:

(*a*) Any extension of credit which is secured by a *bona fide* first lien on improved real estate duly recorded or which is for the purpose of financing or refinancing the construction or purchase of an entire residential building or other entire structure.

(*b*) Any extension of credit over $1,000 which is made for materials and services in connection with repairs, alterations, or improvements upon urban, suburban, or rural real property in connection with existing structures, even though such materials include articles listed in Group C or D in the Supplement, provided the *bona fide* cash purchase price of such articles so listed does not exceed 50 per cent of the total over-all deferred balance.

(*c*) Any extension of instalment loan credit which is made to or for a student for *bona fide* educational purposes.

(*d*) Any extension of instalment loan credit if (1) the proceeds are to be used for *bona fide* medical, hospital, dental, or funeral expenses and (2) the income of the obligor available for the purpose is such that he could not reasonably meet the requirements of this regulation otherwise applicable, and failure to obtain the extension of credit would cause undue hardship to him; *Provided,* That if the Registrant accepts in good faith a written statement signed by the obligor and setting forth the facts relied upon to bring the loan within the exception of this section 6(d) the facts set forth in such statement shall, for the purposes of this regulation, be deemed to be correct.

(*e*) Any extension of credit (1) to finance the purchase of aircraft for use in any activity in respect of which a preference rating of A-10 or higher is in force for deliveries of civil aircraft; or (2) to remodel or rehabilitate any dwelling or residence which the Defense Housing Coordinator, or his authorized agent, shall designate as being for "defense housing" as defined by the Coordinator. Information regarding the procedure for obtaining such a designation may be obtained through any Federal Reserve Bank or branch.

(*f*) Any extension of instalment sale credit which is to be repaid at approximately equal intervals and in approximately equal instalments, the last of which matures within three months after the first day of the calendar month next following such extension.

(*g*) Any extension of credit to a dealer in any listed article, whether a wholesaler or retailer, to finance the purchase of any such article for resale.

(*h*) Any extension of credit which is to be repaid within not more than twelve months and is made to a *bona fide* salesman of automobiles in order to finance the purchase of a new automobile to be used by him principally as a demonstrator.

(*i*) Any extension of credit which is for the purpose of financing a premium in excess of one year on a fire or casualty insurance policy if the proceeds are paid directly to the insurance agent, broker, or company issuing or underwriting the insurance and the extension of credit is fully secured by the unearned portion of the premium so financed.

(*j*) Any extension of instalment loan credit made by the Disaster Loan Corporation.

(*k*) Any extension of instalment loan credit which is made to a person engaged in agriculture, or to a cooperative association of such persons, provided that the extension of instalment loan credit (1) is made by the Land Bank Commissioner on behalf of the Federal Farm Mortgage Corporation and is found, pursuant to regulations issued by the Commissioner, to be necessary to maintain or increase production of essential agricultural commodities, or (2) is approved by the Farm Security Administrator, or his authorized agent, as being necessary for the rehabilitation of a needy farm family, or (3) is for general agricultural purposes and is not for the purpose of purchasing any listed article and not secured by any listed article purchased within 45 days before the extension of credit. In determining whether a loan meets the description of clause (3) above, a Registrant may accept in good faith a written statement signed by the obligor setting forth the facts relied upon to bring the loan within the description, and the facts set forth in such statement shall, for the purposes of this regulation, be deemed to be correct.

(*l*) Any extension of instalment loan credit which is made to a person whose income is derived principally from the operation of a business enterprise of which such person is the owner or proprietor, provided the extension of credit is for the purpose of financing such business enterprise and is not for the purpose of purchasing any listed article or secured by any listed article purchased within 45 days before the extension of credit.

SECTION 7. ENFORCEABILITY OF CONTRACTS

Pending an opportunity for the Board to observe this regulation in operation and except as may subsequently be otherwise provided, all of the provisions of this regulation are designated, pursuant to section 2(d) of the Executive Order, as being for administrative purposes within the meaning of said section 2(d) which provides that non-compliance with provisions of the regulation so designated shall not affect the right to enforce contracts.

SECTION 8. RENEWALS, REVISIONS, AND ADDITIONS

(*a*) **Renewals or Revisions.**—If any obligation or claim evidencing any extension of instalment sale credit or instalment loan credit is renewed or revised by a Registrant, the extension of instalment credit does not comply with the requirements of this regulation if such renewal or revision has the effect of changing the terms of repayment to terms which this regulation would not have permitted in the first instance for such credit;[4] *Provided,* That nothing in this regulation shall be construed to prevent any Registrant from making any renewal or revision, or taking any action that it shall deem necessary in good faith (1) with respect to any obligation of any member of the armed forces of the United States incurred prior to his induction into such service, or (2) for the Registrant's own protection in connection with any obligation which is in default and is the subject of *bona fide* collection effort by the Registrant.

(*b*) **Additions to Outstanding Credit Held by Registrant.**—An extension of instalment sale credit or instalment loan credit does not comply with the requirements of this regulation if it is consolidated with any obligation or obligations held by the Registrant evidencing any prior extension or extensions of instalment credit to the same obligor, unless the additional extension of credit complies with the maximum credit value limitations applicable thereto (if any) and, in addition, the consolidated obligation complies with one of the following options:

[4] If there should be any arrearage which does not arise out of any prearrangement or plan to evade this regulation, the arrearage may be divided equally among and added to the remaining payments scheduled for the liquidation of the credit to which such arrearage relates. This applies to any renewal, revision or consolidation effected in accordance with any provision of Section 8.

Option 1. The terms of the consolidated obligation shall be such as would have been necessary to meet the requirements of this regulation if the several obligations had not been consolidated: *Provided,* That, in order to schedule payments at approximately equal intervals, the consolidated obligation may combine payments that would otherwise have fallen due at different times within any monthly period, but the first of such combined payments shall fall due within one month after such consolidation; or

Option 2. The consolidated obligation shall provide for a rate of payment, throughout its term, which is (A) at least as large per month as the rate of payment or payments on the outstanding obligation or obligations being consolidated would have been for the month commencing on the date of consolidation, and (B) is larger to whatever extent may be necessary in order to repay the consolidated obligation within 15 months.

(*c*) **Credit to Retire Obligations Held Elsewhere.**—Any extension of instalment loan credit, the proceeds of which a Registrant knows or has reason to know will be used in whole or in part to retire any extension of instalment credit not held by such Registrant, shall be subject to the provisions of this regulation to the same extent as if the obligation being retired were held by the Registrant.

(*d*) **Statement of Necessity to Prevent Undue Hardship.**—Notwithstanding the provisions of sections 8(a), 8(b) and 8(c), if a Registrant accepts in good faith a statement of necessity as provided in the following paragraph, the renewed, revised or consolidated obligation may provide for a schedule of repayment as though it were a new extension of instalment loan credit subject to section 5(b), even though such action results in the reduction of the rate of repayment thereon.

The requirements of a statement of necessity will be complied with only if the Registrant accepts in good faith a written statement in form and content prescribed by the Board and signed by the obligor that the contemplated renewal, revision or other action is necessary in order to avoid undue hardship upon the obligor or his dependents resulting from contingencies that were unforeseen by him at the time of obtaining the original extension of instalment credit or which were beyond his control, which statement also sets forth briefly the principal facts and circumstances with respect to such contingencies and specifically states that the renewal, revision, or other action is not pursuant to a preconceived plan or an intention to evade or circumvent the requirements of this regulation.

(*e*) **Obligations Outstanding on September 1, 1941.**—The requirements of sections 8(a), 8(b), and 8(c), do not apply to any renewal or revision of any obligation arising out of any extension of instalment sale credit or instalment loan credit made prior to September 1, 1941; but when any such outstanding obligation has been combined with any extension of instalment sale credit or instalment loan credit made on or after September 1, 1941, or has been the subject of any renewal or revision made on or after such date, such extension of instalment credit shall thereafter be treated for the purposes of this regulation as having been made on or after such date.

(*f*) **Side Loan to Make Down-Payment on Listed Article.**—An extension of instalment credit which is limited in amount by this regulation to the maximum credit value of any listed article, does not comply with the requirements of this regulation if the Registrant making such extension of instalment credit knows or has reason to know that there is, or that there is to be, any other extension of credit in connection with the purchase of the listed article which would bring the total amount of credit extended in connection with such purchase beyond the maximum credit value of such article as specified in the Supplement; *Provided,* That, if the Registrant accepts in good faith a written statement signed by the obligor that no such other extension exists or is to be made, such statement shall, for the purposes of this regulation, be deemed to be correct.

(*g*) **Evasive Side Agreements.**—No extension of instalment credit complies with the requirements of this regulation if at the time it is made there is any agreement, arrangement, or understanding by which the obligor is to be enabled to make repayment on conditions inconsistent with those required by this regulation, or which would otherwise evade or circumvent, or conceal any evasion or circumvention of, any requirement of this regulation.

SECTION 9. MISCELLANEOUS PROVISIONS

(*a*) **Clerical Errors.**—Any failure to comply with this regulation resulting from a mistake in determining, calculating, or recording any price, credit value, or extension of credit, or other similar matter, shall not be construed to be a violation of this regulation if the Registrant establishes that such failure to comply was the result of excusable error and was not occasioned by a regular course of dealing.

(*b*) **Calculating Maximum Maturity of Contract.**—In calculating the maximum maturity of a contract from the date on which any listed article was purchased or any loan was made, depending upon which such date is required by this regulation to be used for such calculation, a Registrant may, at his option, use as such date of purchase or loan any date not more than 15 days subsequent to the actual date thereof.

(*c*) **"Lay-away" Plans.**—With respect to any extension of instalment sale credit involving a *bona fide* "lay-away" plan, or other similar plan by which a purchaser makes one or more payments on an article before receiving delivery thereof, the Registrant may, for the purposes of this regulation, treat the extension of instalment sale credit as not having been made until the date of the delivery of the article to the purchaser.

(*d*) **Outstanding Contracts.**—Except as provided in section 8(e) with respect to contracts made prior to September 1, 1941, which have been renewed, revised, or consolidated on or after such date, nothing in this regulation shall apply with respect to any valid contract made prior to such date.

Whenever this regulation is amended to add any article to the listed articles specified in the Supplement, the amendment shall not apply with respect to the carrying out of any valid contract made prior to the effective date of the amendment; but any renewal, revision or consolidation of any such obligation shall be subject to the requirements of section 8, and for the purposes of section 8(a) the terms of repayment "permitted in the first instance" for such an obligation shall be deemed to be those applicable to such an extension of credit under such amendment.

(*e*) **Payments Arising out of Loans on Instalment Obligations.**—With respect to any loan on the security of an obligation or claim which arises out of an extension of instalment credit, the prohibitions of this regulation shall be deemed to apply only to payments arising out of the obligation or claim rather than to payments arising out of the loan.

(*f*) **"Farmer Plans".**—When appropriate for the purpose of facilitating repayment in accordance with the seasonal nature of the obligor's main source of income, an extension of instalment credit which is made to a person who is engaged in agriculture and derives income principally therefrom may be payable in any amounts and at any intervals, notwithstanding sections 4(c), 4(d) and 5(c): *Provided,* That (1) the extension of credit complies with the applicable provisions concerning the amount and maximum maturity of the credit and (2) at least one-half of the credit is to be repaid within the first half of the applicable maximum maturity.

(*g*) **Records and Reports.**—Every Registrant shall keep such records and make such reports as the Board may from time to time require as necessary or appropriate for enabling it to perform its functions under the Executive Order.

(*h*) **Production of Records.**—Every Registrant, as and when required by the Board, shall furnish complete information relative to any transaction within the scope of the Executive Order, including the production of any books of account, contracts, letters, or other papers in connection therewith.

(*i*) **Transactions Outside United States.**—Nothing in this regulation shall apply with respect to any extension of credit made in Alaska, the Panama Canal Zone, or any territory or possession outside the continental United States.

(*j*) **Right of Registrant to Impose Stricter Requirements.**—Nothing in this regulation shall be construed to modify the right of any Registrant to refuse to extend credit, or to extend less credit than the amount permitted by this regulation, or to require that repayment be made within a shorter period than the maximum permitted by this regulation.

SECTION 10. EFFECTIVE DATE OF REGULATION

This regulation became effective in its original form September 1, 1941; Amendment No. 1 became effective September 20, 1941; Amendment No. 2 became effective December 1, 1941; and Amendment No. 3 shall become effective March 23, 1942, except that the change made in Part 3 of the Supplement by Amendment No. 3 shall not become effective until April 1, 1942.

SUPPLEMENT TO REGULATION W

Part 1. Listed Articles, Maximum Maturities, and Maximum Credit Values.—For the purposes of the regulation the following maximum maturities and maximum credit values shall apply to the following list of articles:

Articles of Consumers' Durable Goods (Whether New or Used)	*Maximum Maturity in Months*	*Maximum Credit Value in per cent of Basis Price*
Group A		
1. Automobiles (passenger cars designed for the purpose of transporting less than 10 passengers, including taxicabs)	15	(See Part 3 of this Supplement)
2. Motorcycles (two or three-wheel motor vehicles, including motor bicycles)	15	
Group B		
1. Aircraft (including gliders)	15	66–2/3
2. Power driven boats, and motors designed for use therein, other than boats or motors designed specifically for commercial use	15	66–2/3
3. Outboard boat motors	15	66–2/3
*4. Bicycles	15	66–2/3
Group C		
1. Mechanical refrigerators of less than 12 cubic feet rated capacity	15	66–2/3
2. Washing machines designed for household use	15	66–2/3
3. Ironers designed for household use	15	66–2/3
4. Suction cleaners designed for household use	15	66–2/3
5. Cooking stoves and ranges designed for household use	15	80
6. Heating stoves and space heaters designed for household use	15	80
7. Electric dishwashers designed for household use	15	66–2/3
8. Room-unit air conditioners	15	66–2/3
9. Sewing machines designed for household use	15	66–2/3
10. Radio receiving sets, phonographs, or combinations	15	66–2/3
11. Musical instruments composed principally of metals	15	66–2/3
*12. Lawn mowers, mower-type edgers and trimmers (whether or not power-driven)	15	66–2/3
*13. Silverware (flatware and hollow ware, whether solid or plated)	15	66–2/3
*14. Clocks, electric or other, designed for household or personal use, and watches	15	80
*15. Motion picture cameras, projectors, and lenses, designed for film gauges less than 35 mm.; still cameras, projectors, lenses and shutters, and enlargers	15	66–2/3

* Added by Amendment No. 3, effective March 23, 1942.

Articles of Consumers' Durable Goods (Whether New or Used)	*Maximum Maturity in Months*	*Maximum Credit Value in per cent of Basis Price*
Group D		
1. Household furnaces and heating units for furnaces (including oil burners, gas conversion burners, and stokers)	18	80
2. Water heaters designed for household use	18	80
3. Water pumps designed for household use	18	80
4. Plumbing and sanitary fixtures designed for household use	18	80
5. Home air conditioning systems	15	66–2/3
6. Attic ventilating fans	15	66–2/3
7. New household furniture (including ice refrigerators, bed springs, and mattresses but excluding floor coverings, wall coverings, draperies, and bed coverings)[1]	15	90
8. Pianos and household electric organs	18	90
*9. Floor coverings (including fabric and linoleum type rugs, carpets, mats, and other floor covering materials, whether or not designed to be affixed to the floor)	15	80
Group E		
1. Materials and services (other than materials, whether or not designed for household use, which are of the kinds listed in Group C or D) in connection with repairs, alterations, or improvements upon urban, suburban or rural real property in connection with existing structures (other than a structure, or a distinct part thereof, which, as so repaired, altered or improved, is designed exclusively for *non-residential* use), provided the deferred balance does not exceed $1,000	18	No limitation

Part 2. Basis Price of Listed Articles Other Than Those in Group A.—The *basis price* of any listed article, other than an automobile or other article listed in Group A, shall be the *bona fide* cash purchase price of the article and accessories purchased *minus* the amount of any allowance made by the seller for any article traded in by the purchaser (including as such a trade-in anything which the seller buys or arranges to have bought from the purchaser at or about the time of the purchase of the listed article).

[1] An article is not new if it has been used by a consumer.
* Added by Amendment No. 3, effective March 23, 1942.

Part 3. Maximum Credit Value of Automobiles and Motorcycles.—For the purpose of the regulation:

(*a*) The maximum credit value of a new automobile or a new or used motorcycle shall be 66⅔ per cent of the *bona fide* cash purchase price.

(*b*) The maximum credit value of a used automobile shall be 66⅔ per cent of whichever is the lower of the following two figures:

(1) the *bona fide* cash purchase price; or
(2) the "appraisal guide value" plus any applicable sales taxes.

"Appraisal guide value" means the estimated average retail value as stated in such edition of any regularly published automobile appraisal guide as the Board may designate for this purpose for use in the territory in which such used automobile is sold. Information as to the guide or guides designated for any given territory may be obtained from any Federal Reserve Bank or branch.

Part 4. Cash Purchase Price.—For the purposes of the Supplement:

(*a*) The *bona fide* cash purchase price of an article includes that of any accessories, and it also includes any applicable sales taxes and any *bona fide* delivery and installation charges; and

(*b*) In the case of any article or accessory for which the Federal price authorities have prescribed a maximum retail price, the maximum credit value shall in no event exceed that resulting from a *bona fide* cash purchase price equal to the total of such maximum retail price and any applicable sales taxes not included therein.

Part 5. Instalment Loan Credit Subject to Section 5(b) of the Regulation.—The maximum maturity of any extension of instalment loan credit of $1,500 or less subject to section 5(b) of the Regulation shall be 15 months.

APPENDIX TO REGULATION W

[This appendix consists of the text of the Executive Order, presented above, pp. 209-14.]